

CLAIMS

I claim:

1. An automatically adjustable rear suspension for trike comprising a supply of pressurized gas pneumatically connected to a valve, at least one air spring pneumatically connected to said valve, said air spring being disposed between a trike swing arm and a trike frame, said valve being mechanically attached to said swing arm by means of a valve pushrod.

2. The automatically adjustable rear suspension for trike of claim 1 wherein said trike swing arm further comprises at least one L arm, each said L arm comprising an L arm horizontal member rigidly attached to an L arm vertical member, each said air spring being disposed between one said L arm horizontal member and said trike frame.

3. The automatically adjustable rear suspension for trike of claim 2 wherein said trike swing arm further comprises an axle, said valve pushrod mechanically connecting said axle and said valve.

4. The automatically adjustable rear suspension for trike of claim 3 further comprising a gas shock absorber attached at one extreme to said trike frame and at an opposite extreme to said trike swing arm.

5. The automatically adjustable rear suspension for trike of claim 4 wherein said supply of pressurized gas comprises an air compressor.

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2 6. The automatically adjustable rear suspension for trike of claim 5 wherein said supply of
3 pressurized gas comprises an accumulator pneumatically connected to said compressor.

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5 7. The automatically adjustable rear suspension for trike of claim 6 wherein said accumulator is
6 pneumatically connected to said valve by means of a valve supply line, and wherein said valve is
7 connected to said at least one air spring by means of an air spring supply line.

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9 8. An automatically adjustable rear suspension for trike comprising a supply of pressurized gas
10 pneumatically connected to a valve, two air springs pneumatically connected to said valve, each
11 said air spring being disposed between a trike swing arm and a trike frame, said trike swing arm
12 being pivotably attached to a motorcycle frame at a pivot point, said trike frame being rigidly
13 attached to said motorcycle frame, said valve being mechanically attached to said swing arm by
14 means of a valve pushrod.

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16 9. The automatically adjustable rear suspension for trike of claim 8 wherein said trike swing arm
17 further comprises two L arms, each said L arm comprising an L arm horizontal member rigidly
18 attached to an L arm vertical member, each said air spring being disposed between one said L arm
19 horizontal member and said trike frame.

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21 10. The automatically adjustable rear suspension for trike of claim 9 wherein said trike swing arm
22 further comprises an axle, said valve pushrod mechanically connecting said axle and said valve.

1 11. The automatically adjustable rear suspension for trike of claim 10 further comprising a gas
2 shock absorber attached at one extreme to said trike frame and at an opposite extreme to said
3 trike swing arm.

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5 12. The automatically adjustable rear suspension for trike of claim 11 wherein said supply of
6 pressurized gas comprises an air compressor.

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8 13. The automatically adjustable rear suspension for trike of claim 12 wherein said supply of
9 pressurized gas comprises an accumulator pneumatically connected to said compressor.

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11 14. The automatically adjustable rear suspension for trike of claim 13 wherein said accumulator is
12 pneumatically connected to said valve by means of a valve supply line, and wherein said valve is
13 connected to said at least one air spring by means of an air spring supply line.

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15 15. A motorized tricycle comprising an automatically adjustable rear suspension for trike, said
16 automatically adjustable rear suspension for trike comprising a supply of pressurized gas
17 pneumatically connected to a valve, two air springs pneumatically connected to said valve, each
18 said air spring being disposed between a trike swing arm and a trike frame, said trike swing arm
19 being pivotably attached to a motorcycle frame at a pivot point, said trike frame being rigidly
20 attached to said motorcycle frame, said valve being mechanically attached to said swing arm by
21 means of a valve pushrod.

1 16. The motorized tricycle comprising automatically adjustable rear suspension for trike of claim
2 15 wherein said trike swing arm further comprises two L arms, each said L arm comprising an L
3 arm horizontal member rigidly attached to an L arm vertical member, each said air spring being
4 disposed between one said L arm horizontal member and said trike frame.

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6 17. The motorized tricycle comprising automatically adjustable rear suspension for trike of claim
7 16 wherein said trike swing arm further comprises an axle, said valve pushrod mechanically
8 connecting said axle and said valve.

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10 18. The motorized tricycle comprising automatically adjustable rear suspension for trike of claim
11 17 further comprising a gas shock absorber attached at one extreme to said trike frame and at an
12 opposite extreme to said trike swing arm.

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14 19. The motorized tricycle comprising automatically adjustable rear suspension for trike of claim
15 18 wherein said supply of pressurized gas comprises an air compressor electrically connected to a
16 motorized tricycle electrical system.

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18 20. The motorized tricycle comprising automatically adjustable rear suspension for trike of claim
19 19 wherein said supply of pressurized gas comprises an accumulator pneumatically connected to
20 said compressor.